

In the Claims:

1. (Currently amended) A semiconductor laser device comprising:

a GaAs substrate;

an InGaAsP quantum well active layer supported on the GaAs substrate, said quantum well active layer being composed of one or a plurality of well layers and a plurality of barrier layers alternately disposed;

an n-type cladding layer and a p-type cladding layer, which are provided in a manner so as to interpose the quantum well active layer therebetween;

a first guide layer provided between the n-type cladding layer and the quantum well active layer; and

a second guide layer provided between the p-type cladding layer and the quantum well active layer,

wherein said semiconductor laser device has an oscillation wavelength of larger than 760 nm and smaller than 800 nm, ~~and~~

wherein the first guide layer is formed of InGaP, and

wherein the second guide layer is formed of AlGaAs and is in contact with the p-type cladding layer and the quantum well active layer.

2. (Canceled)

3. (Original) The semiconductor laser device according to claim 1, wherein the first guide layer has a thickness of 30 Å or more.

4. (Original) The semiconductor laser device according to claim 1, wherein the first guide layer has a composition being lattice-matched with the GaAs substrate or having a compressive strain or a tensile strain of not more than 1% with respect to the GaAs substrate.

5. (Original) The semiconductor laser device according to claim 1, wherein an Al mole fraction of the second guide layer is 0.2 or more.

6. (Currently amended) ~~The A~~ semiconductor laser device ~~according to claim 1~~, comprising:
a GaAs substrate;
an InGaAsP quantum well active layer supported on the GaAs substrate, said quantum well active layer being composed of one or a plurality of well layers and a plurality of barrier layers alternately disposed;
an n-type cladding layer and a p-type cladding layer, which are provided in a manner so as to interpose the quantum well active layer therebetween;
a first guide layer provided between the n-type cladding layer and the quantum well active layer; and
a second guide layer provided between the p-type cladding layer and the quantum well active layer,
wherein said semiconductor laser device has an oscillation wavelength of larger than 760 nm and smaller than 800 nm,
wherein the first guide layer is formed of InGaP, and
wherein a luminous shape stabilizer guide layer formed of AlGaAs is provided between the first guide layer and the n-type cladding layer.

7. (Original) The semiconductor laser device according to claim 6, wherein an Al mole fraction of the luminous shape stabilizer guide layer is 0.2 or more.

8. (Original) The semiconductor laser device according to claim 1, wherein the one or each well layer has a compressive strain.

9. (Original) The semiconductor laser device according to claim 8, wherein a quantity of the compressive strain is not more than 3.5%.

10. (Original) The semiconductor laser device according to claim 1, wherein the barrier layers have a tensile strain.

11. (Original) The semiconductor laser device according to claim 10, wherein a quantity of the tensile strain is not more than 3.5%.

12. (Currently amended) An optical disc unit ~~wherein the semiconductor laser device of claim 1 is used~~ comprising:
a light-emitting device for emitting light to irradiate an optical disc loaded; and
an optical system for collimating the light emitted from the light-emitting device, directing the collimated light to the optical disc, and converging the light on the optical disc,
wherein the light-emitting device comprises a semiconductor laser device including:
a GaAs substrate;
an InGaAsP quantum well active layer supported on the GaAs substrate, said quantum well active layer being composed of one or a plurality of well layers and a plurality of barrier layers alternately disposed;

an n-type cladding layer and a p-type cladding layer, which are provided in a manner so as to interpose the quantum well active layer therebetween;

a first guide layer provided between the n-type cladding layer and the quantum well active layer; and

a second guide layer provided between the p-type cladding layer and the quantum well active layer,

wherein said semiconductor laser device has an oscillation wavelength of larger than 760 nm and smaller than 800 nm,

wherein the first guide layer is formed of InGaP, and

wherein the second guide layer is formed of AlGaAs and is in contact with the p-type cladding layer and the quantum well active layer.

13. (New) The optical disc unit according to claim 12, further comprising:

a photodetector device for receiving signal light coming from the optical disc to convert the signal light to electric signal; and

a reproduction circuit for reproducing data written to the optical disc from the electric signal.

14. (New) An optical disc unit comprising:

a light-emitting device for emitting light to irradiate an optical disc loaded; and

an optical system for collimating the light emitted from the light-emitting device, directing the collimated light to the optical disc, and converging the light on the optical disc,

wherein the light-emitting device comprises a semiconductor laser device including:

a GaAs substrate;

an InGaAsP quantum well active layer supported on the GaAs substrate, said quantum well active layer being composed of one or a plurality of well layers and a plurality of barrier layers alternately disposed;

an n-type cladding layer and a p-type cladding layer, which are provided in a manner so as to interpose the quantum well active layer therebetween;

a first guide layer provided between the n-type cladding layer and the quantum well active layer; and

a second guide layer provided between the p-type cladding layer and the quantum well active layer,

wherein said semiconductor laser device has an oscillation wavelength of large than 760 nm and smaller than 800 nm,

wherein the first guide layer is formed of InGaP, and

wherein a luminous shape stabilizer guide layer formed of AlGaAs is provided between the first guide layer and the n-type cladding layer.

15. (New) The optical disc unit according to claim 14, further comprising:

a photodetector device for receiving signal light coming from the optical disc to convert the signal light to electric signal; and

a reproduction circuit for reproducing data written to the optical disc from the electric signal.